



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

RBW109-3101-87-113-7

Job Sheet 189591



4624

Part No: RBW109-3101-87-113-7

Job Qty: 4 pcs

Part Name: Reaction, Support Pressure



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 1/28/19

Job Tracking No:

Due Date: 3/15/19

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: DWG RBW109-3101-87-113 Rev.3 IPP Rev. A 19.01.25 New issue DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Conventional Lathe - 1	4 pcs	3/15/19		0.00	8.00	Conventional Lathe - 1		
							Conventional Lathe - 2		
110	QC 2	4 pcs	3/15/19		0.00	0.00	QC 2 - 1		
							QC 2 - 12		
							QC 2 - 14		
							QC 2 - 17		
							QC 2 - 19		
							QC 2 - 2		
							QC 2 - 20		
							QC 2 - 22		
							QC 2 - 23		
							QC 2 - 25		
							QC 2 - 32		
							QC 2 - 33		
							QC 2 - 35		
							QC 2 - 38		
							QC 2 - 39		
							QC 2 - 4		
							QC 2 - 40		
							QC 2 - 44		
							QC 2 - 45		
							QC 2 - 48		
							QC 2 - 49		
							QC 2 - 50		
							QC 2 - 51		
							QC 2 - 52		
							QC 2 - 54		
							QC 2 - 56		
							QC 2 - 57		
							QC 2 - 62		
							QC 2 - 63		



Dart Aerospace Ltd.
1270 Aberdeen Street
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CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Container No: S162903



Part: RBW109-3101-87-113-7

Job No: 189591

Serial No/Batch: S162903

Revision: 3

Inspector:

Exp Date:

Instructions:

Date: 03/15/19

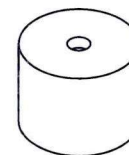
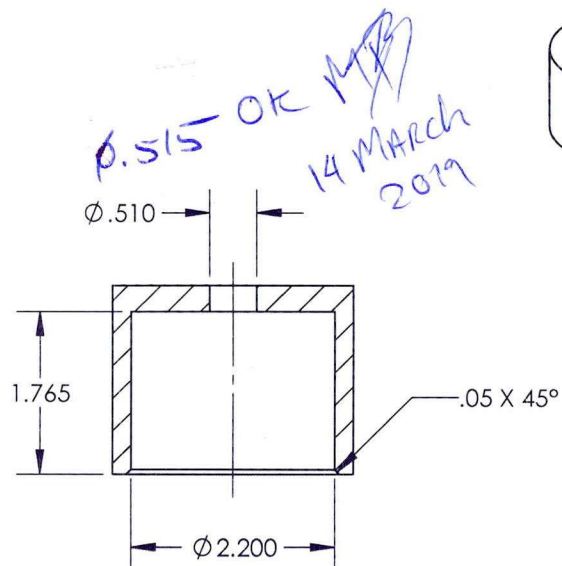
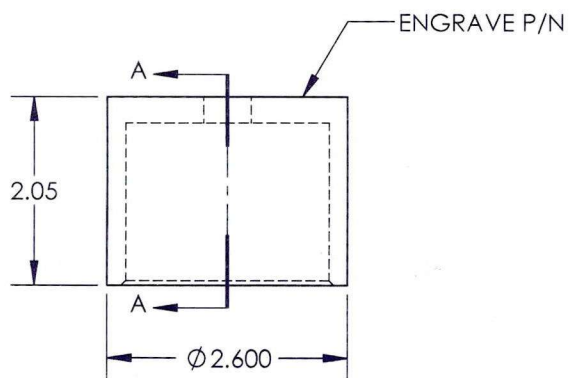
120	QC 8	4 pcs	3/15/19	0.00 0.00	QC 2 - 8	
					QC 8 - 12	
					QC 8 - 14	
					QC 8 - 17	
					QC 8 - 20	
					QC 8 - 25	
					QC 8 - 3	
					QC 8 - 32	
					QC 8 - 33	
					QC 8 - 35	
					QC 8 - 38	
					QC 8 - 39	
					QC 8 - 4	
					QC 8 - 44	
					QC 8 - 45	
					QC 8 - 49	
					QC 8 - 58	
					QC 8 - 8	
					QC 8 - 9	
					QC 8 - 68	
130	Outsource - 13 - Zinc Plating	4 pcs	3/15/19		GRO002-VC	03/10/2019 PL
140	Packaging 2-1 - Receive - B4B	4 pcs	3/15/19	0.00 0.00	Packaging 2 - 1 - B4B	
					Packaging 2 - 2 - B4B	
					Packaging 2 - 3 - B4B	
					Packaging 2 - 5 - B4B	
					Packaging 2 - 4 - B4B	
					Packaging 2 - 6 - B4B	
					Packaging 2 - 7 - B4B	
					Packaging 2 - 8 - B4B	
					Packaging 2 - 9 - B4B	
					Packaging 2 - 10 - B4B	
					Packaging 2 - 11 - B4B	
					Packaging 2 - 12 - B4B	
					Packaging 2 - 13 - B4B	
					Packaging 2 - 14 - B4B	
					Packaging 2 - 15 - B4B	
					Packaging 2 - 16 - B4B	
					Packaging 2 - 17 - B4B	
					Packaging 2 - 18 - B4B	
					Packaging 2 - 19 - B4B	
					Packaging 2 - 20 - B4B	
150	QC 6	4 pcs	3/15/19	0.00 0.00	Packaging 2 - 21 - B4B	
					Packaging 2 - 22 - B4B	
					Packaging 2 - 23 - B4B	
					Packaging 2 - 24 - B4B	
					Packaging 2 - 25 - B4B	
160	Packaging 3-1 - Stock - B4B	4 pcs	3/15/19	0.00 0.00	Packaging 2 - 26 - B4B	
					QC 6 - 38	
					QC 6 - 42	
					QC 6 - 9	
					QC 6 - 68	MAR 25 2019 DAS 68 9-89
					QC 6 - 61	
					Packaging 3 - 1 - B4B	
					Packaging 3 - 2 - B4B	
					Packaging 3 - 3 - B4B	
					Packaging 3 - 4 - B4B	
					Packaging 3 - 5 - B4B	
					Packaging 3 - 6 - B4B	
					Packaging 3 - 7 - B4B	

				Packaging 3 - 8 - B4B	
				Packaging 3 - 9 - B4B	
				Packaging 3 - 10 - B4B	
				Packaging 3 - 11 - B4B	
				Packaging 3 - 12 - B4B	
				Packaging 3 - 13 - B4B	
				Packaging 3 - 14 - B4B	
				Packaging 3 - 15 - B4B	
				Packaging 3 - 16 - B4B	
				Packaging 3 - 17 - B4B	
				Packaging 3 - 18 - B4B	
				Packaging 3 - 19 - B4B	
				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	
				Packaging 3 - 23 - B4B	
				Packaging 3 - 24 - B4B	
				Packaging 3 - 25 - B4B	
				Packaging 3 - 26 - B4B	
170	QC 21 - SA	4 pcs	3/15/19	0.00 0.00	QC 21 - SA - 21
Part Op 100 - 1-Machine as per DWG. 2-Debur Descriptions: 120 - Engrave T/N and/or P/N number using MARKTRONIC engraver as per DWG. 130 - -Issue P/O ; _____ -Zinc plate, ASTM B633 TYPE 1 SC2 -Color; Clear -Material type; 4140 -Certificate of Conformity is required 140 - Certificate of Conformity is required					
Job BOM					
Part / Item	Component Name	Quantity	Operation	Container	
MT-4140QT-R2.750	AISI 4140 Quenched & Tempered Steel Round Bar 2.750" Dia.	.7160 ft (.179 ea)	100-Conventional Lathe - 1	5046861	
Job Allocations					
Operation	Component Part	Required	Inventory	Allocated	
100-Conventional Lathe - 1	MT-4140QT-R2.750	1	17	0	
Part Specifications					
Specifications could not be found.					

Plex 1/28/19 3:17 PM Dart.lajeunesse.marie

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	15-0283	-7 CH'D ENGRAVE NOTE WAS ENGRAVE RBW109-3101-87-109 IS ENGRAVE P/N, , ADDED 4142 Q&T TO MATERIAL CALL OUT.	9/1/2015	RJC	JAG
3	16-0077	-7 CH'D FINISH WAS CAD PLATE YELLOW QQ-P-416, TYPE II, CLASS II IS ZINC PLATE ASTM B633 TYPE I SC 2. CH'D MAT'L WAS 4140 Q&T/4142 Q&T IS 4140/4142. ADDED HEAT TREAT RC 28-34.	7/15/2016	DEW	SM



SECTION A-A

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 189591 MLS
1901-29

(-7)

REACTION, SUPPORT PRESSURE

DART AEROSPACE	
TITLE TOOL ASSY, M/R GRIP BUSHINGS REM/INSTL	
DWG NO. RBW109-3101-87-113-7	REV 3
MAT'L 4140/4142	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
HEAT TREAT RC 28-34	.XXX ± .005 FRACTIONS ± 1/8
FINISH ZINC PLATE	.XX ± .01 ANGLES ± 5°
SPEC ASTM B633 TYPE I SC 2	.X ± .1 SURFACES = 125/√
DRAWN BY: GILBERT	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
CHECKED: CLOUGH	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
OPPS APPR: ANDERSON	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
QA APPR: LINDSAY	USED ON MODEL
APPROVED: MACKOVJAK	AW109, AW119
SCALE 1:2	DATE 2/24/2014 SHEET 5 OF 9

Entered: _____ Date: _____



WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐	DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐			
Date :	Sequence #:	QTY Affected :		MRB (QSI042)	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor	
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Presservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐ ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled		FAULT CATEGORY ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread			
Other/Details:					



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PURCHASE ORDER

PO042912



Supplier: GRO002-VC
Group Altech
2455 Halpern
St Laurent
QC
H4S 1N9 Canada
Phone: 514-335-3666
Fax: 514-335-3868

Attention: Grenon, Sylvie

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: PO042912

PO Date: 3/18/19

Due Date: 3/25/19

Purchase Order

Revision:

Revision Date:

Ship-To Contact: Phone:

Via: Ground

Pymt Terms: Net 60

Freight Terms:

Special Comments:

Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	189591	RBW109-3101-87-113-7	Reaction, Support Pressure -Issue P/O : -Zinc plate, ASTM B633 TYPE 1 SC2 -Color; Clear -Material type; 4140 -Certificate of Conformity is required	Firmed	-	3/25/19	4 pcs	0 pcs	4 pcs	\$22.50/pcs	\$90.00

Line Item Note: ** NEED BACK MARCH 25,2019 **

Grand Total: \$90.00



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PURCHASE ORDER

PO042912



Order Notes

Procurement Quality Clauses

A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)

A022 Apical Processing
A024 process certifications
A026 certification of material conformance

A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

A handwritten signature in blue ink, likely belonging to Patrick Lussier, is written over the bottom right of the Order Notes section.

Plex 3/19/19 11:35 AM dart.Lussier.Patrick



Certificat de Conformité / Certificate of Compliance



2455, Rue Halpern | Saint-Laurent | Québec | H4S 1N9
Tel: 514-335-3666 Fax: 514-335-3868
www.groupealtech.com

Bon de Livraison / Packing Slip

017760- 1

Livré à / Ship to

DART AEROSPACE LTD

1270 ABERDEEN STREET

HAWKESBURY, ON, K6A1K7

CANADA

Tel.: 613-632-5200 Fax.:

Client / Customer:

DART AEROSPACE LTD

1270 ABERDEEN STREET

HAWKESBURY, ON, K6A1K7

CANADA

BUYER:

Date expédition Ship date		Créé Par Generated By	Transport / No de Compte Courier / Acc. No.	Bon de commande Client Customer Purchase Order No.				
20-Mar-2019		Shankar Anand		PO042912				
#Ligne Line#	No. de Série / # Pièce Part Number / Line Item Details Job # / Ref #	Description pièce(s)	CATG. U/M	Quantités / Quantities				
				Comm. /Ordered	Exp/ Shipped	Qté NC/ NC Qty	Qté Scrap/	À venir/ Back Order
1	RBW109-3101-87-113-7 Rev.	RBW109-3101-87-113-7 01 -ZINC-CLEAR TRI [ZINC CLEAR TRIVALENT] 24 HRS B633 TYPE 1 SC2	ZINC CH	4	4	0	0	0

Notes Additionnelles / Additional Notes

Epaisseur réelle
Actual ThicknessInspecteur Qualité
Quality InspectorRéçu par
Received By

Nous certifions que les pièces énumérées ci-dessus ont été traitées en conformité avec votre commande et vos spécifications et rencontrent les exigences.
Notre responsabilité financière et légale ne sera pas supérieure au montant de la facture issue.

We hereby certify that the parts listed above have been process in accordance with your purchase order and specifications and are in conformance with your requirements.
Our financial and legal responsibility will not be higher than the amount of invoice.